Inclined Planes Examples

Ex1: There is a mass of 10.0kg on a 300 inclined plane. Assume no friction, with what acceleration does the block fall down the incline plane?

Ex2: Using the information in Ex 1, what would the acceleration be if there was a coefficient of friction equal to 0.456?

Ex 3: What must the coefficient of friction be so that a mass of 45.0kg on an incline of 23.10 not slide down the incline?

Ex 4: Using the information from example 3, what would the block’s final velocity be given that it was “let go” and the inclined plane was 3.73m long and suddenly became frictionless?